



To:

United States Department of Agriculture

CENTER FOR VETERINARY BIOLOGICS NOTICE NO. 02-12

Marketing and Regulatory Programs

Subject: Reagents and Testing of Master Seed Viruses

Animal and Plant Health Inspection Service

Biologics Licensees and Applicants

Directors, Center for Veterinary Biologics

Veterinary Services

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This notice provides guidance on the recommended maximum titer of Master Seed Virus that can be blocked by reagents available from the Center for Veterinary Biologics (CVB) and how the CVB conducts confirmatory testing when CVB reagents do not neutralize the Master Seed.

When conducting extraneous agent testing for many of the Viral Master Seeds, the Master Seed must be neutralized or blocked prior to inoculating required cell lines. This requires use of antiserum or monoclonal antibody (MAb) that is monospecific and neutralizing for the Master Seed agent. Any antibody to potential contaminating agents in the antiserum or MAb precludes use of that reagent. Appropriate antiserum or MAb often is obtainable by the licensee or applicant from the CVB. Alternatively, the licensee or applicant's antiserum or MAb can be used.

During CVB confirmatory Master Seed testing, CVB origin antiserum or MAb is initially used. In the event that the CVB reagent cannot neutralize the undiluted Master Seed, the licensee or applicant is contacted and provided with the option to supply the reagent used by the licensee or applicant during their testing. Sufficient quantities are requested to allow confirmatory testing for antibody against other agents. Upon confirmation of the lack of antibody to other agents, the CVB will conduct testing using the licensee or applicant's reagent. In the event that the CVB reagent and/or the licensee or applicant's reagent cannot neutralize the undiluted Master Seed, the test is considered inconclusive and the Master Seed is not eligible for use.

With each reagent, there is a maximum amount of virus that can be neutralized. The general guidelines for the minimum titer that CVB supplied reagents will neutralize are contained in Attachment 1. Center for Veterinary Biologics supplied reagents will often neutralize greater titer, but such neutralization is lot dependent. Those titers are provided to assist the licensee or applicant in planning the recommended maximum titer that Master Seeds should be produced at when utilizing CVB reagents in testing. Any Master Seed with a greater titer may require the licensee to provide the antiserum or MAb for their testing, submit evidence of adequate validation of the reagent to the CVB, and provide the CVB with sufficient quantities to validate the reagent and conduct confirmatory testing.



Information on the availability and the method for obtaining reagents provided by the CVB for Master Seed Virus testing to assist in complying with the Code of Federal Regulations (9 CFR) is contained in the current version of Veterinary Services Memorandum No. 800.97, Standard Reference Preparations, Test Reagents, and Seed Cultures for Laboratory Test Reagents.

/s/ Steven A. Karli

Steven A. Karli Director Center for Veterinary Biologics

Attachment

<u>Agent</u>	Viral Master Seed <u>Blocking Titer (log₁₀)</u>
Bluetongue	4.0
Bovine coronavirus	4.0
Bovine leucosis	4.0
Bovine respiratory syncitial	4.0
Bovine rotavirus	4.0
Bovine viral diarrhea types 1 and 2	4.0
Canine distemper	4.0
Canine adenovirus 2	6.0
Canine coronavirus	4.0
Canine parainfluenza	6.0
Canine rotavirus	6.0
Eastern equine encephalitis	4.0
Ehrlichia ristici	see footnote ¹
Equine infectious anemia	4.0
Equine influenza type A2	4.0
Equine influenza type A1	4.0
Equine rotavirus	4.0
Equine rhinopneumonitis	4.0
Equine viral arteritis	3.5
Feline rhinotracheitis	5.0
Feline infectious peritonitis	6.0
Feline Chlamydia psittaci	see footnote ²
Feline immunodeficiency	unknown
Feline calicivirus	strain dependent ³
Feline panleukopenia	4.0
Feline leukemia	see footnote ¹
Infectious bovine rhinotracheitis	4.0
Infectious canine hepatitis	6.0
Measles	unknown—
	No quantification of CVB sera
Mink enteritis	3.0
Mink distemper	4.0
Ovine ecthyma virus	4.0
Parainfluenza type 3 (bovine)	4.0
Porcine reproductive and respirator	y syndrome virus 3.5
Porcine parvovirus	4.0
Porcine rotavirus	4.0
Pseudorabies virus	4.0
Rabies	6.0

¹ Non permissive in test cells ² Block with tetracycline ³ F-9 4.0, C-14 4.0, CF1/68 3.0, F5 4.0 (or similar cross reactive strains)

Swine influenza	4.0
Swinepox	4.0
Toxoplasma gondii	see footnote ¹
Transmissible gastroenteritis	4.0
Vaccinia	3.5
Venezuelan equine encephalitis	2.0
Western equine encephalitis	4.0